Testimony of Kodiak Mayor Pat Branson Before the Senate Committee on Energy & Natural Resources Regarding Emergency Response Preparedness for Natural Disasters January 30, 2018

The people of the Kodiak Archipelago have a long history of responding to challenges and emergency situations. Just as our islands are renowned for their natural and rugged beauty, the resiliency of our people is a fundamental part of our unique home on an isolated island in the North Pacific.

The site that ultimately became the City of Kodiak was actually first established because of natural disaster. In 1788, a devastating earthquake and tsunami destroyed the Russian capital of Russian America in Three Saints Bay, located near the present-day village of Old Harbor. The inhabitants were forced to move farther north and reestablish their capital at the present-day location of Kodiak.

Our long history with disaster doesn't mean we've become fatalistic or paralyzed by fear. It has instead instilled in us a core sense of civic-mindedness and community spirit that were on full display a week ago during our most recent earthquake and tsunami evacuation. In many respects, Kodiak is uniquely prepared for these types of incidents because our culture and heritage is ingrained with the basic principles of the Incident Command System and the National Incident Management System, particularly preparedness, communications and information management, resource management, command, and ongoing maintenance in the face of daily adversities and challenges.

Readiness is a community responsibility. We all have our integral roles to play, from individuals to elected officials. My testimony today will discuss how the City of Kodiak engages in emergency response, how we interact and cooperate with Borough, State, and Federal emergency management partners, issues and concerns we have relating to our existing emergency response capability, and current critical infrastructure gaps and needs for our Archipelago to better protect ourselves when the next event occurs – because if you are prepared, an emergency event need not become a crisis.

Kodiak's Emergency Response Protocols

The Kodiak Emergency Operations Center ("EOC") is staffed by both City of Kodiak and Kodiak Island Borough employees. Per City and Borough ordinances, the Kodiak City Manager serves as the Emergency Services Director ("ESD"), and directs both City and Borough staff in declared emergencies to meet the needs of the community. Once activated, the ESD notifies the Borough Manager of ongoing incidents to facilitate proper notification of Borough officials.

Kodiak's response correlates to the size and complexity of a specific event. Response to events that are within a department's budget, manpower, legal authority, and policy procedures are handled by staff at the department level, up to and including activation of any mutual aid agreements. The Kodiak department chiefs keep the ESD informed of situations that are

expanding in nature and consuming departmental resources which may interfere with normal operations of the department. The ESD may activate some or all EOC manning positions based off on the departmental Incident Commander's needs (i.e. Logistics section to assist in procurement of fuel; full activation when a structure fire has progressed into wild land/urban interface fire and threatens heavily populated areas that require evacuation/sheltering). For larger scale incidents, such as tsunami alerts, the ESD determines directly the response and activation levels based on the severity of the threat. As part of this testimony, we are submitting the Kodiak Emergency Operations Plan for a more detailed understanding of the response protocols.

The ESD has the option to call in support from the State Emergency Operations Center should it be determined that the incident exceeds or potentially exceeds Kodiak's response capability and additional resources are necessary. Interoperability and communication with our Federal counterparts on the US Coast Guard Base are excellent. The Kodiak Police Department maintains the "Public Safety Answering Point" ("PSAP"), a call center responsible for receiving emergency response communications.

The January 23rd Earthquake

At 12:32 AM one week ago, Kodiak received a wake-up call from Mother Nature. We were jolted awake by a magnitude 7.9 earthquake only 125 miles away, and within moments our community sprang into action. Our tsunami alert sirens were activated, the incident management team was assembled and rapidly opened the inter-agency emergency operations center, and our first responders went to work protecting community assets and shepherding our citizens to safety. This event was truly an eye-opening incident for our town, because even though we were hit by a series of minor tsunamis generated by this quake, there was no loss of life – and just as importantly, it gave us the opportunity to evaluate our response and realize that we have critical infrastructure and emergency preparedness needs we must address before the next incident occurs.

One such critical need and safety priority is our fire station. Along with protecting the City of Kodiak itself, the Kodiak Fire Department provides all emergency medical services and transport to the Kodiak road system, as well as any responses requiring mutual aid outside of the City – including to our local United States Coast Guard base, which is the largest in the nation.

However, the fire station is an aging 60 year old structure, and the 1964 tsunami came within 10 feet of inundating this facility. During Tuesday's event, as soon as our fire fighters could regain their footing, they were immediately preparing their evacuation of the station to get themselves, our priceless Fire, Rescue, and EMS vehicles, and a stockpile of emergency supplies out of harm's way and to higher ground in order to continue protecting our community no matter what the evening held in store for us.

Fortunately, we were not hit by a sizeable tsunami, but once the all-clear was given and they returned to the station, we discovered that it had sustained significant structural damage from the quake itself – and the full extent of this damage cannot yet be fully realized until the building finishes settling after this most recent tremor (please refer to the included document

"Kodiak Fire Station Earthquake Damage"). What we do know, however, is that a new fire hall is needed immediately to replace our historic 60 year old station.

Another area of concern is in our emergency communications abilities. Patrol officers of the Kodiak Police Department were forced to repeatedly traverse inundation zones to use the Public Address systems in their squad cars advising people to get out and get to high ground, because Kodiak does not have an integrated tsunami PA system at our disposal. Additionally, due to funding shortfalls at the state level, our Alaska State Trooper post has been greatly reduced, and we needed to deploy KPD personnel outside their jurisdiction - up to 12 miles outside of city limits – to assist in evacuations of citizens living in this area, and to remain there to prepare for the possibility of extensive tsunami damage, which further reduced the number of officers available within city limits.

Kodiak's Emergency Response Shortfalls

While Kodiak has been diligent in utilizing its limited resources to maintain our emergency response capability, we have some glaring preparedness shortfalls. These are:

- 1. Insufficient Staffing;
- 2. Lack of a PA Capable System;
- 3. Insufficient Radio Capability;
- 4. Out-of-Date Public Safety Answering Point;
- 5. Inadequate Communications Repeaters and Receivers

Insufficient Staffing

Our EOC staff is only large enough to handle the first 24 hours during a major event, at which point the ESD would need to request assistance from the State EOC. This is particularly acute in our Public Works Department with its limited staff experience. We have ten field employees and five employees working at the water and wastewater treatment facility. Of the ten field staff, only three or four can be sent on their own to solve major problems without detailed support. This is especially true when dealing with the water system. It is critical to avoid shutting off water unless absolutely necessary. Contamination of the system is a serious issue when shutting down water so it needs to be done carefully to protect the system and public health.

Public Address Systems

We need to upgrade all of the tsunami warning sirens to a PA capable system, such as the type used in Portland, Oregon and Japan. During the most recent event Kodiak Police Department patrol officers drove through vulnerable neighborhoods using their car-based PA systems to inform people to evacuate to higher ground. Having an Archipelago-wide PA

tsunami alert system integrated into the Public Safety Answering Point would allow Kodiak Police Department dispatch staff to announce emergency information, thus freeing patrol officers to conduct other duties during an evacuation event, and ensuring even those residents living in the most remote villages will be receiving timely evacuation and emergency preparedness information. The cost of replacing and upgrading the tsunami alert system is \$2.5 million.

Radio Capability

Radios are also a critical need for Kodiak right now, both for civilians (portable radios able to access emergency broadcast frequencies), as well as new secure radios that allow interoperability and thus communications amongst our First Responders (City, Borough, State, or Federal). Along with radio broadcasts and communications, both our Emergency Response and Emergency Broadcast abilities are limited by aging generator backups. These generator systems are in critical need of upgrade and replacement.

The City and Borough have done extensive research and planning to determine the extent of any upgrade and/or replacement of radios, software, and accessories. We believe that it is necessary to procure fifty-five (55) portable radios and forty-four (44) mobile radios to meet the needs of the local First Responders (ESD personnel, police, fire, and ambulance services). Rough order of magnitude costs for these upgrades is \$450,000.

Public Safety Answering Point

The Kodiak Police Department's Central Communications system for the Public Safety Answering Point was last upgraded in 2005. The existing operating systems are no longer supported by the manufacturer, and the spare parts saved from upgrading other systems around the state may not be compatible with our system for firmware and hardware. The Windows XP Operating System is not compatible with current versions of video monitors and other network firmware and hardware, and IT support on the Windows XP systems is expiring and very hard to find. Other PSAPs in the state have upgraded to a new Motorola system with high reliability and ease of use. This system is capable of analog and digital signaling and working in either clear or encrypted mode, with audio and control features that are very robust and programmable. The cost of this upgrade is roughly \$400,000.

Repeaters and Receivers

These are the systems that allow the Kodiak Police and Fire Dispatch to make voice audio transmissions.

The main repeaters are located on Pillar Mountain in the communications shelter. The repeaters receive signals from the transmitting radios below and the repeaters amplify that signal to nearly 250 watts and re-broadcast it across the City of Kodiak's jurisdiction and beyond. The existing repeaters are 12 years old with millions of push to talk conversations on them, and are still good for a couple more years. Replacement will be necessary by 2019 to meet anticipated changes in the FCC rules for narrowband digital modulation.

There are three receiver sites with comparators, gateways, and switches that select the best signal from each radio transmitting to the Police Department. None of the radios have problems hearing outgoing signal from Pillar, so the system is designed to capture and improve radio "Talk Back" signal to the system and to dispatch. There are FCC public safety digital mandates coming on line in 2020. Our current receivers are not compatible with new systems coming on line to meet the changing regulatory requirements. We have estimated that upgrade in the repeaters and receivers to improve performance and comply with the FCC mandates will cost roughly \$370,000.

In sum, the anticipated cost of upgrading our communications capability to meet preparedness objectives ranges between \$1.25 million and \$1.5 million. Kodiak does not have the financial capability to meet the full cost of these upgrades.

Kodiak Public Safety Facility Shortfalls

The City of Kodiak identified the need to replace its fire station and has been working toward a replacement plan since 2004. The building has clearly outlived its design life. The building is composed of three structures and sits on a site that is enveloped well within the most-recent tsunami inundation zone modeling (see https://earthquake.alaska.edu/tsunamis/atom). The structure is built of cement block type construction built in the 1950s with two block and wood frame additions added in the 1960s and 1975. The structure poses a significant risk of failure in a seismic event. Cracks in the walls and initial separation of one of the additions from the rest of the structure occurred following the recent large earthquakes of 7.1 on January 24th, 2016, and the 7.9 a week ago on January 23rd, 2018. It has ongoing plumbing, drainage, and water infiltration issues. The facility houses personnel, fire and rescue apparatus, three ambulances, and many types of specialty equipment and medical supplies that support the Advanced Life Support services offered to the entire Kodiak area well beyond the City boundaries. The building condition poses constant challenges and problems to the crews who work and live in the structure. Work to replace this building must continue because it is a key emergency response and life-safety facility for Kodiak and continues to require constant maintenance.

The City has broken this project into phases. Phase I of this project already funded by the City was used to study and select a future site. It included the removal of an old building, site grading, and other work following the demolition of the old building. Phase I is 95% complete. Phase II would involve site acquisition, design and construction. We have estimated that the cost of this phase is \$14,000,000.

<u>The role and importance of the United States Coast Guard in our community, State, and Nation</u>

Coast Guard Base Kodiak is the largest Coast Guard unit in the country, and home to over 2,500 active duty and dependent personnel. Formerly a US Navy Base, Base Kodiak serves several tenant commands, including the Air Station, USCGC Munro, USCGC Spar, USCGC Haley, the Aids to Navigation Team, and the North Pacific Regional Fisheries Training Center.

Kodiak's Coast Guard personnel serve under the Coast Guard 17th district in Juneau which encompasses 3,853,500 square miles and over 47,300 miles of shoreline throughout Alaska and the Arctic. The Air Station, with a crew of 350 personnel, maintains and operates 6 MH-60T Jayhawk helicopters which perform search and rescue and deploy to Cold Bay, Cordova, and support Arctic operations in the summer. Four MH-65 Dolphin helicopters deploy regularly on Coast Guard vessels that patrol the Bering Sea. The 5 HC-130 aircraft perform search and rescue, logistics and law enforcement missions in Alaska and the West Coast. USCGC Munro is a 378 foot high endurance cutter that conducts Bering Sea patrols. USCGC Spar, known as 'The Aleutian Keeper," is a 225 foot buoy tender that supports Aids to Navigation efforts in the Aleutians. USCGC Alex Haley, formerly a US Navy salvage and rescue ship, is a 283 foot medium endurance cutter that conducts Bering Sea patrols.

Coast Guard personnel and their families live in or near the City of Kodiak and are an integral and active part of our community. The Kodiak Police and Fire Departments have cooperative responsibility to protect the base through KFD's EMS service; and both KFD and KPD serve Coast Guard personnel and their families who live in town. Our remote and isolated location in the Gulf of Alaska has fostered a mutual respect and dependence between our civilian and military families. Without adequate facilities and equipment to deal with emergencies such as natural disasters, catastrophic accidents, or human-caused devastation, we cannot fulfill our cooperative obligations which may jeopardize not only our community, but the ability of the Coast Guard to perform its various missions both regionally and throughout our Nation.

Recommendation

The cost of full upgrading the communications capability and public safety facilities to meet preparedness objectives is staggering. Kodiak is not alone in this regard. Coastal communities throughout Alaska face this daunting task.

The Trump Administration has recently circulated an outline for a future Infrastructure Initiative. Under the Administration's proposal, twenty-five percent (25%) of the total package would be dedicated to a rural infrastructure program. The proposal contemplates a broad range of eligible activities, including transportation, communications, power generation and distribution, and water and wastewater resources. We believe that any proposal crafted by the Congress should also include emergency response equipment and public safety buildings.

In earthquake zones, such as Kodiak, being prepared is a necessary and a vital component of maintaining local economies, safety of our residents, and peace of mind. From our own personal experience, both historically and from one week ago, we cannot emphasize enough the crucial importance of adding emergency preparedness infrastructure to the scope of any Infrastructure package.